

The problems of plantain production in Cameroon.

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LES PROBLEMES DE LA PRODUCTION DES PLANTAINS AU CAMEROUN

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RESUME - Au Cameroun l'organisation du développement des cultures vivrières (Food Development Authority) encourage la production de plantains. Elle fournit du matériel de plantation et essaie de mettre au point des méthodes de multiplication rapide. L'organisation dirige aussi des expériences d'engrais, des mesures de contrôle phytosanitaire et des essais de cultures mélangées. Mais des recherches sur le conditionnement et la conservation des plantains sont nécessaires.

INTRODUCTION

Achieving an acceptable balance between food and population is one of the most difficult problems facing any developing country. It can hardly be said that food production in Cameroon is sufficient. This problem is made more acute by the fact that food traders export foodstuffs to some neighbouring countries, especially to Gabon and Equatorial Guinea.

In order to tackle the food shortage problem, the government created the Food Development Authority in September, 1973 after the launching of the Green Revolution in March of the same year. The Authority has as its objective the development of food crop production and the marketing with a view to supplying the urban centres throughout the country.

The Food Development Authority started its activities by encouraging plantain (*Musa paradisiaca*) cultivation with

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the aid of government subventions. Plantain occupies a very prominent place in the Cameroonian diet. The traditional foods for the greater part of the indigenous population are root and tuber crops and plantain, but among higher income groups wheat bread becomes important.

Before the creation of the Food Development Authority, plantains were grown by peasants either as a compound crop or interplanted through cocoa and coffee farms. The authority is therefore encouraging the creation of peasant farms where modern agricultural techniques are applied.

It is difficult to estimate plantain production as the crop is handled mostly by peasants. The present annual production is, however, estimated to be over 1,000,000 tons.

BREEDING

Nothing appears to have been done with regard to breeding. There is great need for hybrid clones which are high-yielding and disease resistant. The National Office for Scientific and Technical Research (ONAREST) has to tackle this problem.

FAO fertilizer trials at Pouma and Monatele gave yield increases of 56% and 45% respectively.

STORAGE, MARKETING AND PROCESSING

The plantain is very perishable and does not store for a long time. The traditional methods of harvesting and handling cause a lot of mechanical damage which leads to rapid storage losses. The fact that this commodity cannot store for a long time creates a problem in marketing.

The usual way of preparing plantain for food is to boil the fresh green or ripened fingers after peeling. This then is taken with vegetable sauce. Sometimes the fingers which are not quite ripe are pounded in a mortar after cooking to produce «fofoo» which is also taken with sauce. An indigenous way of preserving plantain is to dry the ripe fingers after boiling. The dried fingers are reboiled and pounded into «fofoo» whenever need arises.

It cannot be said that the boiling and drying of plantain is a satisfactory method of storage. Apart from the fact that the dried plantains cannot be stored for an indefinite period

the food value is reduced. There is, therefore, a need to process plantain into flour and powder. These products can be stored for an indefinite period, and various food items can be prepared from them. Unfortunately, however, this subject does not appear to have been given the attention it deserves.

CONCLUSION

Not much work appears to have been done on plantain. The traditional methods of cultivation still prevail. In view of the prominent position occupied by plantain in the Cameroonian diet, research work should be intensified on this crop, especially in the fields of breeding and manuring. Breeding should aim at producing hybrid clones which are high yielding and disease resistant. There is need to look for a manuring formula through soil analysis and critical experimentation.

The processing of plantain into flour and powder should be given sufficient attention as this appears to be the only means by which this commodity can be preserved.



However, the Food Development Authority is establishing a museum plot of plantain varieties. These varieties differ in various aspects which include height of stem, bunch form, weight of bunch, size and shape of fingers, colour, flavour and probably time of fruiting and disease resistance. Observations are being made, and this information may form the basis of future breeding work. So far, the museum plot contains the following 14 varieties

Essong
 Petite naine rouge
 Mboe
 Amoung
 Osen
 Obel
 Elat
 Mimbimi
 Koe
 Mvep
 Zip
 French sombre
 Meki
 Nkoundi

More varieties are still being collected.

RAPID MULTIPLICATION

The Food Development Authority is responsible for the distribution of plantain suckers to farmers. The aim therefore is to produce the maximal possible yield of suckers for distribution to farmers, fruit production being of less importance, in order to cope with the very high demand.

Various nursery techniques, including «goose-necking», are being tried.

INTERCROPPING

The intercropping of plantains with other crops, for instance, cocoyams may be possible within the first year of establishing the farm. Thereafter the shade provided by the plantains may hinder the successful development of the other crop. In a trial being carried out by the Food Development Authority, the plantain suckers and cocoyam setts were planted at the same time. The plantains were planted at a spacing of 3m x 3m (square planting) and the cocoyams were planted between the rows at a spacing of 1m. The cocoyams which have not yet been harvested are showing promising results.

Although the labour requirements and income from plantain cultivation are but little variable with season, intercropping in the first year will offset some of the overhead costs of establishing the farm especially in the

forest areas where land preparation involves under-brushing, clear felling, lining, pegging and holing.

Intercropping will also help to suppress weeds especially during the first year.

WEED CONTROL

Most peasant farms are often abandoned in weeds. The weeds vary from various species of grasses to broad-leaved herbs mostly of the Compositae family. Amongst all the weeds *Eupatorium odoratum* is the most aggressive, and it is found on many peasant farms.

The Food Development Authority is confronted with this problem. Chemical weed control trials have therefore been started, and various herbicides are being tried. These include Ansar, Gramoxone, Banazol, Gramuron and P80.

PEST AND DISEASE CONTROL

The problem of pest and disease infestation is more acute where farms have been neglected in weeds.

The banana borer (*Cosmopolites sordidus*) appears to be the most destructive of all the pests, and it is found in many banana and plantain farms.

Leaf spot (*Mycosphaerella musicola*) is of the greatest economic importance in all banana and plantain growing areas.

The banana borer is controlled by very few peasants. Leaf spot is not controlled at all. This accounts for the very poor yields of plantains in most areas.

The Food Development Authority is, however, trying Furadan for the control of borers and nematodes. Kepone 5%, an insecticide and Mocap, a nematicide are also being tried.

MANURING

Not many experiments and trials have been carried out in manuring plantains. Thus there is as yet no formula to guide the peasant in this connection. The trials now conducted by the Food Development Authority coupled with the research work which is going to be carried out by ONAREST may go a long way towards solving those problems of manuring which up to the present have been so obscure.

It is certain that if the economic levels of fertilization are properly established through soil analysis and experiments carried out on the land in question or on a similar soil type, the output of plantains will be greatly increased.